

## WIRELESS CONTROLLER AND APPLICATION INTERFACE FOR AN MRI SYSTEM

### Abstract of the Disclosure

A wireless remote control unit (60) that operates in the radio frequency bandwidth is used for interfacing with a sequence control system (B) and an image processing system (C) from within a magnetic resonance suite (A) in the presence of a magnetic field produced by a main magnet assembly (10). The sequence control system and the image processing system are connected with a first wireless transceiver (30) whose antenna (28) is located within a magnetic resonance suite. The first transceiver (30) communicates with the remote control unit (60) and a second transceiver (32) connected with a transmitter (40) and gradient coil amplifiers (34). Resonance signals received by a radio frequency coil (46) are communicated to the first transceiver (30) by the second transceiver (32) or by a transceiver (46') mounted on the receiving coil. The receiver coil transceiver also engages in a handshake protocol to identify itself.